

## CLAIMS

It is claimed:

1. (currently amended) An electronic control with a power supply that  
5 isolates control voltages from ac source voltages, said control having a plurality  
of electrical connections between digital nodes and ac nodes, said electrical  
connections being made through passive components, and subsequent signals on  
digital nodes being compared to ascertain the state of one or more ac paths.

2. (currently amended) The control in accordance with claim 1 wherein  
10 said ascertained state of at least one of said ac paths indicates whether an ac  
switching device is open or closed.

3. (currently amended) The control in accordance with claim 1 wherein  
said ascertained state of at least one of said ac paths indicates whether an ac  
functional load component is present.

15 4. (original) The control in accordance with claim 1 wherein at least one  
of said signals is used to determine zero crossings.

5. (currently amended) The control in accordance with claim 1 wherein  
said passive components limit current from said ac source through an operator to  
a safe level should said operator contact any control node.

20 6. (currently amended) An electronic control with a power supply that  
isolates control voltages from ac source voltages, said control having a plurality  
of electrical connections between digital nodes and ac nodes, said electrical  
connections being made solely through passive components, and subsequent  
signals on digital nodes being compared to ascertain the state of one or more ac  
25 paths.

7. (currently amended) The control in accordance with claim 6 wherein  
said ascertained state of at least one of said ac paths indicates whether an ac  
switching device is open or closed.

8. (currently amended) The control in accordance with claim 6 wherein said ascertained state of at least one of said ac paths indicates whether an ac functional load component is present.

9. (original) The control in accordance with claim 6 wherein at least one  
5 of said signals is used to determine zero crossings.

10. (currently amended) The control in accordance with claim 6 wherein said passive components limit current from said ac source through an operator to a safe level should said operator contact any control node.

11. (currently amended) An electronic control with a power supply that  
10 isolates control voltages from ac source voltages, said control having a plurality of electrical connections between digital nodes and ac nodes, said electrical connections being made through non-reactive passive components, and subsequent signals on said digital nodes being compared to ascertain the state of one or more ac paths.

12. (currently amended) The control in accordance with claim 11 wherein  
15 said ascertained state of at least one of said ac paths indicates whether an ac switching device is open or closed.

13. (currently amended) The control in accordance with claim 11 wherein  
20 said ascertained state of at least one of said ac paths indicates whether an ac functional load component is present.

14. (original) The control in accordance with claim 11 wherein at least one of said signals is used to determine zero crossings.

15. (currently amended) The control in accordance with claim 11 wherein  
25 said non-reactive passive components limit current from said ac source through an operator to a safe level should said operator contact any control node.

16. (currently amended) The control in accordance with claim 11 wherein said electrical connections are made solely through non-reactive passive components.

17. (currently amended) The control in accordance with claim 16 wherein said ascertained state of at least one of said ac paths indicates whether an ac switching device is open or closed.

18. (currently amended) The control in accordance with claim 16 wherein  
5 said ascertained state of at least one of said ac paths indicates whether an ac functional load component is present.

19. (original) The control in accordance with claim 16 wherein at least one of said signals is used to determine zero crossings.

20. (currently amended) The control in accordance with claim 16 wherein  
10 said non-reactive passive components limit current from said ac source through an operator to a safe level should said operator contact any control node.